Medications

- **Famotidine/Pepcid**
- 20 mg Oral 2x/daily
    - Pharmacologic: Histamine -2-blocker
    - Reason: The patient is taking this to prevent gastric ulcers.
    - Key nursing assessment: The nurse should monitor liver panels and uric acid levels.

- **Glycopyrrolate/Robinul**
- I mg Gastric tube 2x/daily
    - Pharmacologic: Anticholinergic
    - Reason: The patient is taking this to reduce chronic severe drooling and risk for aspiration.
    - Key nursing assessment: The nurse should assess heart rate, heart sounds, and monitor for shortness of breath.

- **Clonidine HCL/Catapres**
- 0.1 mg Gastric tube H.S.
    - Pharmacologic: Centrally acting alpha agonist
    - Reason: The patient is taking this reduce muscle spasticity and treat high blood pressure.
    - Key nursing assessment: The nurse should monitor blood pressure and heart rate and hold is systolic blood pressure is <90 or heart rate is < 50.

Demographic Data

Admitting diagnosis: Respiratory distress related to Respiratory Syncytial Virus

Psychosocial Developmental Stage: Identity v. Role Confusion

Age of client: 14 years old

Sex: Male

Weight in kgs: 23.6 kg

Cognitive Development Stage: Formal Operation

Allergies: N/A

Date of admission: 08/27/2021

Admission History

On August 27th, 2021 a 14 year old male was admitted to Carle emergency room for low grade fever, runny nose, shortness of breath, and productive cough. The mother brough him into the emergency department and provided the child's history via translator. The mother states that these symptoms started 2 days ago on August 25th. She was giving the patient cough syrup at home to help relieve symptoms. The patient's symptoms progressed, and the patient had worsening shortness of breath. The patient was placed on high flow nasal canula and given an IV bolus in the emergency department. The patient will be admitted to the pediatric unit for further evaluation.

Pathophysiology

Disease process: Respiratory syncytial virus (RSV) is an infection of the upper respiratory tract. "RSV can be contracted through direct contact with respiratory secretions or particles on objects contaminated with the virus" (Ricci, 2021). RSV invades the nasopharynx, spreading down the lower airway via aspiration of the upper airway secretions (Ricci, 2021).

S/S of disease: A child with RSV can present with many different symptoms. The child may appear air-hungry, exhibiting cyanosis and respiratory distress, which include tachypnea, retractions, accessory muscle use, grunting, and periods of apnea" (Ricci, 2021). Upon auscultation of the lungs, a cough may be present, and you may hear wheezing, or in severe cases, the chest will be quiet without a wheeze.

Method of Diagnosis: Diagnosing RSV can be done using a few studies and assessments. Chest radiography may show hyperinflation and area of atelectasis. Blood gases might show carbon dioxide retention and hypoxemia. Lastly, RSV will show positive results on a respiratory ID panel.

Treatment of disease: There is no specific treatment for RSV; the infections will resolve on their own in 1-2 weeks. Treatment usually includes comfort measures, so the nurse may consult respiratory therapists for breathing treatments and prescribe Tylenol to reduce fevers.

Relevant Lab Values/Diagnostics

Admission

- **AST: 38**
  - Normal: 5-34
  - The patient has high AST levels because it is common for individuals with neuromuscular disorders to have AST/ALT leak out of damaged muscles which causes the level to become elevated.
- **Neutrophils: 8.17**
  - Normal: 1.64- 7.87)
  - The patient has high neutrophils because the patient was admitted with respiratory distress and RSV, which would make neutrophils elevated due to fighting off an infection.
- **RSV: positive**
  - Normal: Negative
  - The patient was admitted for respiratory failure and upon the respiratory ID panel the patient was positive for RSV.
- **Urine pH: 9.0**
  - Normal: 5.0-8.0
  - The patient could have a high urine pH due to delayed bladder control, incomplete emptying, and urine retention which puts him at an increased risk for frequent UTIs.
- **Procalcitonin: 0.7**
  - Normal: <0.5
  - The patient has elevated procalcitonin due to his RSV infection and possible sepsis.

10/24/21

- **Creatinine: 0.49**
  - Normal: 0.55-1.02
  - The patient has low creatinine levels due to his lower muscle mass.
- **Platelets: 379**
  - Normal: 199-367
  - The patient has a high platelet count most likely caused by his RSV infection.
- **CRP: 1.81**
  - Normal: <1.0
  - The patient has a high CRP due to his infection and inflammation in the body.
- **Urine: amber, cloudy**
  - Normal: straw, clear
  - The patient most likely has abnormal urine color due to poor kidney function and possible dehydration.

Diagnostic Tests

- **Chest x-ray:** The patient had a chest x-ray due to presenting on admission with a cough, possible sepsis, and respiratory distress.
- **Barium Swallow test:** The patient had a Barium Swallow test done because the patient had aspirated.
- **X-ray:** The natient had an x-ray done to confirm NG tube nlacement in the stomach.

Medical History

Previous Medical History: Cough, microcephaly, non-verbal learning disorder, postextubation stridor, pontocerebellar hypoplasia, short stature, spastic quadriplegia cerebral palsy, global development delay, seizures, ataxia

Prior Hospitalizations: Patient has been hospitalized since August 27th.

Chronic Medical Issues: Cough, microcephaly, non-verbal learning disorder, postextubation stridor, pontocerebellar hypoplasia, short stature, spastic quadriplegia cerebral palsy, global development delay, seizures, ataxia

Social needs: Nonverbal, DCFS involvement, whole family possible deportation, father is incarcerated, speaks Kanjobal, patient will be going to a facility called Renaissance this week sometime for further treatment and care

Active Orders

- **Vitals signs q4h, BP daily**
  - The patient has active orders for assessing vital signs to ensure the body is remaining stable.
- **Weight once/weekly**
  - The patient has active orders to assess weight gain from tube feedings to ensure effectiveness.
- **Continuous feeding order. Goal 70mL/hr, flush with 30 mL q4h**
  - The patient has active orders for a feeding order because the patient was suffering from failure to thrive and needs extra nutrients and calories.
- **Elevate HOB 30-45 degrees**
  - The patient has active orders to elevate the HOB to prevent aspiration.
- **G-J tube care**
  - The patient has active orders for tube care to minimize blockage inside the tube and avoiding interactions between feeds and medications.
- **Strict I & O**
  - The patient has active orders for strict I & O to make sure the body is not retaining or excreting too much fluid.
- **Continuous pulse oximetry**
  - The patient has active orders for continuous pulse oximetry to ensure proper oxygen exchange.
- **Continuous oxygen monitoring, remain above 92%**
  - The patient has active orders for maintaining oxygen saturation above 92%, and if he doesn't, he will need to have supplemental oxygen put on.

Assessment										
General	**Integument**	**HEENT**	**Cardiovascular**	**Respiratory**	**Genitourinary**	**Gastrointestinal**	**Musculoskeletal**	**Neurological**	**Most recent VS (highlight if abnormal)**	**Pain and Pain Scale Used**
Patient appeared to be calm and happy. He was alert with his eyes open. Patient did not appear to be in any distress. He was groomed and clean.	Skin was warm, dry, and firm. Skin turgor was 2+. No rashes or bruises present. Patient has a small wound on the abdomen by the belly button.	Head/neck symmetrical, equal range of motion. Tympanic membrane gray/pearly, no discharge present Eyes symmetrical, EOMI intact. Nose symmetrical, no deviation. Gum's pink/moist, teeth missing. Thyroid midline, at risk for aspiration	Heart sounds auscultated S1 and S2 present. No murmurs. No gallops or rubs in S3 and S4. Carotid, radial, ulnar, brachial, femoral, popliteal, dorsal pedis, and posterior tibial pulses +2 bilaterally. Capillary refill less than 3 seconds.	Lungs sounds clear but diminished. Respirations shallow and unlabored. Patient has a productive cough. Patient is on room air.	Urine straw, clear yellow. Patient is incontinent. Patient's genitals clean and dry.	Patient's abdomen is flat, soft, and nondistended. Bowel sounds active and audible in all four quadrants. Patient's last bowel movement was 11/5. Patient has 16 Fr G-tube.	Using r-FLACC scale patient did not appear to be in any pain. Patient is in a wheelchair. Patient has spastic muscle jerking with flexion and extension. Patient's active range of motion is moderately impaired.	Patient has spastic extremity movements. Patient's eyes are PERLA. Patient is nonverbal but alert. Patient has a global developmental delay.	**Time:** 0400 **Temperature:** 99.8 F **Route:** Axillary **RR:** 20 **HR:** 135 **BP and MAP:** 107/61 MAP: 76 **Oxygen saturation:** 100 % **Oxygen needs:** N/A	Pain scale used was r-FLACC. Upon observation, patient appeared to be in no pain. Patient was watching a movie.

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Impaired gas exchange related to RSV as evidenced by a positive respiratory ID panel for RSV.	Risk for aspiration related to spastic quadriplegia cerebral palsy as evidenced by the need for a G-tube.	Risk for infection related to RSV as evidenced by a positive respiratory ID panel for RSV.
Rationale I chose this diagnosis because the patient presented to the ED with shortness of breath and productive cough.	Rationale I chose this diagnosis because the patient's mother stated he aspirated on food while she was feeding him.	**Rationale** I chose this diagnosis because RSV can lead to other complications within the body.
Interventions **Intervention 1:** Position patient with head of the bed elevated, in semi-fowler's position as tolerated **Intervention 2:** Turn the patient every 2 hours	**Interventions** **Intervention 1:** During feedings, position patient with head of elevated 30-45 degrees, and maintain for 30-45 minutes after feeding. **Intervention 2:** Stop continual feeding temporarily when turning or moving patient.	**Interventions** **Intervention 1:** Wash hands or perform hand hygiene before contact with the patient. **Intervention 2:** Assess patient's temperature every 4 hours
Evaluation of Interventions Patient was positioned in semi-fowler's and turned every 2 hours. The patient remained symptom free from respiratory distress and had unlabored respirations at 12-20 per minute.	**Evaluation of Interventions** Patient was positioned in semi-fowler's position during feedings and patient's feedings was paused while turning. Patient remained aspiration free during G-tube feeding and turning.	**Evaluation of Interventions** Hands were washed / sanitized before interaction with the patient. Patient's temperature was assessed every 4 hours along. Patient remained fever free throughout clinical.

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